

ABSTRACT OF THE DISCLOSURE

A Stirling engine comprising:

5 a displacer unit having displacer cylinders, displacers slidably arranged in the chambers of the displacer cylinders, expansion chambers and contraction chambers into which, and from which, the operation gas flows with the operation of the displacers; and

10 a power piston unit having a power cylinder having an operation chamber communicated with either the expansion chamber or the contraction chamber of the displacer unit, and a power piston slidably arranged in the power cylinder;

15 wherein the displacer cylinders of the displacer unit are equipped with a heating wall surrounding a heat source and cooling walls forming a plurality of cylinder chambers surrounding the heating wall; and

20 the displacers of the displacer unit are slidably arranged in the plurality of cylinder chambers in the directions to approach the heat source and to separate away from the heat source.